

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for producing a high resolution photographic image of a scene, said device comprising:

- (a) a photographic imaging system;
- (b) a micromirror array containing an array of micromirrors, each mirror being capable of tilting individually in at least two tilt directions to reflect different sets of pixels representing locations of the scene, said micromirror array being positioned with respect to the photographic imaging system so that the each mirrors of the micromirror array transfers a reflected pixels of representing said locations of the scene to be photographed to the photographic imaging system; and
- (c) an assembly system which forms a high resolution image of the scene by mosaicing extracted color values from each reflected pixel from each mirror of the micromirror array into a high resolution image of the scene.

2. (Original) The device of claim 1 wherein the photographic imaging system comprises a digital camera or a video camera.

3. (Currently Amended) A method for producing a high resolution image of a scene comprising:

- (a) positioning mirrors of a micromirror array to reflect a set of pixels representing locations of a scene;
- (a)(b) photographing the set of reflected pixels from the micromirror array with the photographic imaging system of the device of claim 1;
- (c) extracting relevant color values from each reflected pixel; and
- (d) repeating steps (a)-(c) at least once up to a sufficient number of times to provide an image of a desired resolution, wherein each repetition of step (a) reflects a different set of pixels; and
- (e) assembling the extracted relevant color values into an image of high image the scene.

4. (New) The device of claim 1, further comprising a system for correlating the extracted color values to corresponding locations of the scene.

5. (New) The device of claim 1, wherein each micromirror may be positioned in at least 320 different positions in each said tilt direction.

6. (New) The device of claim 1, wherein each micromirror can be oriented in any of at least 100,000 positional states.

7. (New) The device of claim 1, wherein the micromirror array comprises a micro-electromechanical array.

8. (New) The device of claim 1, wherein the micromirror array comprises a micro-optical-electromechanical array.

9. (New) The device of claim 1, wherein the photographic imaging system comprises a camera capable of collecting digital images.

10. (New) The device of claim 9, wherein the camera comprises a video camera.

11. (New) The device of claim 1, wherein movement of each micromirror is individually controllable.

12. (New) The device of claim 1, wherein the photographic imaging system extracts more than one color value from at least some of the reflected pixels.

13. (New) The method of claim 3, wherein step (e) comprises the steps of correlating the extracted color values to corresponding locations of the scene and placing the extracted color values at said locations to provide the image of the scene.

14. (New) The method of claim 3, wherein each micromirror is moved in at least two different tilt directions during the performance of said method.
15. (New) The method of claim 3, wherein the images are collected at frame rate.
16. (New) The method of claim 3, wherein steps (a)-(c) are repeated thousands to millions of times per second.
17. (New) The method of claim 3, wherein steps (a)-(c) are repeated at least 70 times.
18. (New) The method of claim 3, wherein steps (a)-(c) are repeated at least 100,000 times.
19. (New) The method of claim 3, wherein more than one color value is extracted from at least some of the reflected pixels.
20. (New) The method of claim 19, wherein said color values are RGB color values.